

In the claims:

Please cancel claims 70, 80 and 83.

Please amend claims 20, 31, 33, 36, 38, 39, 41-54, 56, 57, 59-67, 71, 72, 74-76, 78, 81, 82, 84-86, 88-90 and 92 as follows:

sub 17
C1
20. (Amended) An electronic game apparatus comprising:
a display for displaying information indicative of action in an electronic game;
an input device that receives input from a user playing the electronic game;
an output device having a gyrostap with at least one degree of freedom on at least one toppling axis; and
a controller that controls action in the electronic game based at least in part on input received from the user and that selectively topples the gyrostap to provide a sensation to the user playing the electronic game.

21. The apparatus of claim 20 wherein each of the display, the input device, the output device, and the controller are physically separate components.

22. The apparatus of claim 20 wherein the input device and the output device are integrated as a common component.

23. The apparatus of claim 20 wherein the display is physically separate from at least one of the input device, the output device and the controller.

24. The apparatus of claim 20 wherein two or more of the display, the input device, the output device, and the controller are integrated into a common housing.

25. The apparatus of claim 24 wherein the common housing is configured to be handheld by the user of the electronic game.

26. The apparatus of claim 24 wherein the common housing has an appearance that resembles an instrument.

27. The apparatus of claim 26 wherein the instrument comprises a weapon.

28. The apparatus of claim 27 wherein the weapon comprises a knife, a sword, a gun, a hammer, an axe, or a light saber.

29. The apparatus of claim 26 wherein the instrument comprises an object other than a weapon.

30. The apparatus of claim 20 wherein the electronic game apparatus comprises an electronic sword game.

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C2
31. (Amended) The apparatus of claim 20 wherein the controller is programmable and wherein the apparatus further comprises software executed by the controller for controlling one or more of (i) action in the electronic game, (ii) receiving input from the user, and (iii) causing the gyrostator to topple selectively on the at least one toppling axis to produce a tactile sensation on the output device.

32. The apparatus of claim 20 further comprising a sensor for determining a position or an attitude, or both, of the input device.

C3
33. (Amended) The apparatus of claim 32 wherein the controller selectively topples the gyrostator to provide a sensation to the user playing the electronic game based at least in part on information determined by the sensor.

34. The apparatus of claim 33 wherein the sensor comprises a gyroscopic inertial positioning system.

Sub DP 35. The apparatus of claim 33 wherein the sensor comprises one or more infrared transceivers.

C4 36. (Amended) The apparatus of claim 33 further comprising a safety device that prevents toppling of the gyrostat when the user is disengaged.

37. The apparatus of claim 36 wherein the safety device comprises a dead-man's switch.

C5 38. (Amended) The apparatus of claim 20 further comprising at least one additional gyrostat, the controller selectively and independently controlling the gyrostats to provide a sensation to the user playing the electronic game.

39. (Amended) The apparatus of claim 20 further comprising means for selectively hindering toppling of the gyrostat as the user is applying input to the input device.

40. The apparatus of claim 39 wherein the means comprises a mechanical linkage having a predetermined degree of freedom.

41. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide tactile feedback to the user playing the electronic game.

C6 42. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide torque to the user playing the electronic game.

43. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide sensations to the user that correspond to action in the electronic game.

Sub by 44. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide feedback to the user that motivates the user to conserve rotational energy of the gyrostat.

45. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide feedback to the user that urges the user to move the input device in a predetermined direction.

46. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide feedback to the user that urges the user to move the input device in a direction toward a target area.

OK 47. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide a sensation to the user that resists a movement by the user of the input device.

48. (Amended) The apparatus of claim 20 wherein the controller selectively topples the gyrostat to provide feedback to the user that urges the user to remain within a predetermined field of play.

49. (Amended) A network-based electronic game system comprising:

(a) a plurality of electronic game components, each comprising:

- (i) an input device that receives input from a user playing the electronic game;
- (ii) an output device having a gyrostat with at least one degree of freedom on at least one toppling axis; and
- (iii) a controller for controlling action in the electronic game based at least in part on input received from the user and for selectively toppling the gyrostat to provide a sensation to the user playing the electronic game; and

(b) a network for enabling communication among the plurality of electronic game components.

50. (Amended) An electronic game apparatus comprising:
a display for displaying information indicative of action in an electronic game;
a gyrostator with at least one degree of freedom on at least one toppling axis; and
a controller that selectively topples the gyrostator in accordance with action in the electronic game.

51. (Amended) The apparatus of claim 50 wherein the controller is programmed to topple the gyrostator selectively to provide a sensation to the user playing the electronic game.

52. (Amended) The apparatus of claim 50 wherein the controller is programmed to topple the gyrostator selectively to generate a physical effect in one or more components of the electronic game apparatus.

53. (Amended) The apparatus of claim 50 wherein the gyrostator is embodied in an output device.

54. (Amended) The apparatus of claim 53 wherein the controller selectively topples the gyrostator to provide a sensation to a user playing the electronic game.

55. The apparatus of claim 50 further comprising an input device that receives input from a user playing the electronic game, and wherein the controller further controls action in the electronic game based at least in part on input received from the user.

56. (Amended) The apparatus of claim 50 wherein the display is physically separate from at least one of the gyrostator and the controller.

C7 Sub D7 57. (Amended) The apparatus of claim 50 wherein two or more of the display, the gyrostator, and the controller are integrated into a common housing.

58. The apparatus of claim 57 wherein the common housing is configured to be handheld by the user of the electronic game.

59. (Amended) The apparatus of claim 50 wherein the controller is programmable and wherein the apparatus further comprises software executed by the controller for controlling one or more of (i) action in the electronic game, (ii) receiving input from a user, and (iii) selectively toppling the gyrostator.

60. The apparatus of claim 50 further comprising at least one additional gyrostator, the controller selectively and independently controlling the gyrostats in accordance with action in the electronic game.

C8 61. (Amended) The apparatus of claim 50 wherein the controller selectively topples the gyrostator to provide tactile feedback to a user playing the electronic game.

62. (Amended) The apparatus of claim 50 wherein the controller selectively topples the gyrostator to provide torque to a user playing the electronic game.

63. (Amended) The apparatus of claim 50 wherein the controller selectively topples the gyrostator to provide feedback to a user that motivates the user to conserve rotational energy of the gyrostator.

64. (Amended) The apparatus of claim 50 further comprising an input device and wherein the controller selectively topples the gyrostator to provide feedback that urges the user to move the input device in a predetermined direction.

cb D 65. (Amended) The apparatus of claim 50 further comprising an input device and wherein the controller selectively topples the gyrostat to provide feedback that urges a user to move the input device in a direction toward a target area.

cb 66. (Amended) The apparatus of claim 50 further comprising an input device and wherein the controller selectively topples the gyrostat to generate a physical effect that resists movement of the input device.

67. (Amended) The apparatus of claim 50 wherein the controller selectively topples the gyrostat to provide feedback that urges a user to remain within a predetermined field of play.

68. The apparatus of claim 50 wherein the electronic game apparatus is configured to be hand-held by a user of the electronic game.

69. The apparatus of claim 50 wherein the electronic game apparatus comprises an electronic sword game.

C9 71. (Amended) A method of controlling an electronic game, the method comprising selectively toppling a gyrostat on a toppling axis in at least one degree of freedom to provide a sensation to a player based on action in the electronic game, wherein selectively toppling the gyrostat to provide a sensation to the player comprises providing tactile feedback to the player based on action in the electronic game.

72. (Amended) The method of claim 71 wherein selectively toppling the gyrostat to provide a sensation to the player comprises urging the player to move a game apparatus component in a predetermined direction.

73. The method of claim 72 wherein urging the player comprises providing the user with a sensation that encourages the user to move the game apparatus component in a direction toward a target area.

74. (Amended) The method of claim 70 wherein selectively toppling the gyrostat to provide a sensation to the player comprises resisting a movement by the player of a game apparatus component.

c10 75. (Amended) The method of claim 70 wherein selectively toppling the gyrostat to provide a sensation to the player comprises providing an incentive to the player to remain within a predetermined field of play.

76. (Amended) The method of claim 70 wherein selectively toppling the gyrostat to provide a sensation to the player comprises providing an incentive to the player to conserve a rotational speed of the gyrostat.

77. The method of claim 70 further comprising receiving input from the player.

c11 78. (Amended) The method of claim 77 wherein selectively toppling the gyrostat to provide a sensation to the player is based at least in part on input received from the user.

79. The method of claim 77 further comprising controlling the action of the electronic game based at least in part on the received input, the sensation provided to the player, or both.

c12 81. (Amended) A method of controlling an electronic game, the method comprising selectively toppling a gyrostat in at least one degree of freedom on a toppling axis, wherein selectively toppling the gyrostat to cause a physical effect based on action in the electronic game comprises imparting a force on one or more electronic game components.

82. (Amended) The method of claim 81 wherein the physical effect is intended to be sensed by a human player of the electronic game.

C13 84. (Amended) Software, embodied in a form understandable by a programmable controller, for causing the programmable controller to control an electronic game having a gyrostator with at least one degree of freedom on a toppling axis, the software comprising instructions to selectively topple the gyrostator to cause a physical effect based on action in the electronic game, wherein the instructions to selectively topple the gyrostator to cause a physical effect based on action in the electronic game comprise instructions for selectively toppling the gyrostator to provide a sensation to a user playing the electronic game.

85. (Amended) The software of claim 84 wherein the instructions for selectively toppling the gyrostator to provide a sensation to the player comprise instructions that result in providing tactile feedback to the player based on action in the electronic game.

86. (Amended) The software of claim 84 wherein the instructions for selectively toppling the gyrostator to provide a sensation to the player comprise instructions that result in urging the player to move a game apparatus component in a predetermined direction.

87. The software of claim 86 wherein the instructions that result in urging the player comprise instructions that result in providing the user with a sensation that encourages the user to move the game apparatus component in a direction toward a target area.

88. (Amended) The software of claim 84 wherein the instructions for selectively toppling the gyrostator to provide a sensation to the player comprise instructions that result in resisting movement of a game apparatus component.

C14 89. (Amended) The software of claim 84 wherein the instructions for selectively toppling the gyrostator to provide a sensation to the player comprise instructions that result in providing an incentive to the player to remain within a predetermined field of play.

C14 90. (Amended) The software of claim 84 wherein the instructions for selectively toppling the gyrostator to provide a sensation to the player comprise instructions that result in providing an incentive to the player to conserve a rotational speed of the gyrostator.

91. The software of claim 84 further comprising instructions for receiving input from the player.

C15 92. (Amended) The software of claim 91 wherein the instructions for selectively toppling the gyrostator to provide a sensation to the player include instructions that consider at least in part input received from the user.

93. The software of claim 91 further comprising instructions for controlling the action of the electronic game based at least in part on the received input, the sensation provided to the player, or both.

Please add claims 94-99.

94. (New) The apparatus of claim 20, wherein the gyrostator has two or more degrees of freedom on two or more toppling axes.

95. (New) The system of claim 49, wherein the gyrostator has two or more degrees of freedom on two or more toppling axes.

C14 96. (New) The apparatus of claim 50, wherein the gyrostator has two or more degrees of freedom on two or more toppling axes.

97. (New) The method of claim 71, wherein the method comprises selectively toppling the gyrostator on two or more toppling axes in two or more degrees of freedom.

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98. (New) The method of claim 81, wherein the method comprises selectively toppling the gyrostat on two or more toppling axes in two or more degrees of freedom.

99. (New) The software of claim 84, further comprising instructions to selectively topple the gyrostat in at least another degree of freedom on at least one other toppling axis.
